APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,685	08/31/2001	Henry Fang	SLA 1070	2111

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EXAMINER
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ART UNIT	PAPER NUMBER
2122	

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Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.</td><td colspan="2">Applicant(s)</td></tr>
<tr><td>09/944,685</td><td colspan="2">FANG, HENRY</td></tr>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

   A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>31 August 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is

      closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-17</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

     1.☐ Certified copies of the priority documents have been received.

     2.☐ Certified copies of the priority documents have been received in Application No. _____.

     3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date <u>8/31/01</u>.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the communication filed on 8/31//2001.

Claims 1-17 are pending in the application.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent Claims 1, 7, 12, leads Claims 1-17. Each of these independent claims contains the trademark/trade name HAVi, and its HAVi specification product. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe the product and the product's elements such as "HAVi specification protocols", "HEventRepresentation" and "HAVi Level 2" and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   The Claims 1-4, 7-8, 12-14 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

As per Claims 1-4: Claim 1 that leads the scope of Claims 1-4 recites a method for maintaining HEventRepresentation virtual keys, the elements in the HAVi specification. The method merely recites accessing elements in a User interface (*from a HAVi level two (L2) graphical user interface (GUI), accessing a JAR file; and, in response to accessing the JAR file, retrieving virtual key information*) without further limitations to produce a concrete and useful result. The recitation shows the method that is not tangibly embodied: i.e. an execution upon the recited step is not done by the device using the HAVi specification protocols, but rather is done by a user. Such claim fails to be in the technological or useful arts and thus fails to recite patent eligible subject matters.

Claims 2-4 fail to remedy the deficiencies of independent claim 1.

According to the analysis above, Claims 1-4 are to manipulate an abstract idea and held nonstatutory.

As per Claims 7-8:

Claim 7 that leads the scope of Claims 7-8 recites a method for maintaining HEventRepresentation virtual keys, the elements in the HAVi specification. The method merely recites accessing elements in a User interface (*from a HAVi level two (L2) graphical user interface (GUI) accessing a Java input/output (I/O) ResourceBundle; and, in response to accessing the ResourceBundle, retrieving virtual key information*) without further limitations to produce a concrete and useful result. The recitation shows that the method is

not tangibly embodied. Such claim fails to be in the technological or useful arts and thus fails to recite patent eligible subject matters.

Claim 8 fails to remedy the deficiencies of independent Claim 7.

According to the analysis above, Claims 7-8 are to manipulate an abstract idea and held nonstatutory.

As per Claims 12-14: Claim 12 that leads the scope of Claims 12-14 recites a method for maintaining HEventRepresentation virtual keys, the elements in the HAVi specification. The method merely recites accessing elements in a User interface (*from a HAVi level two (L2) graphical user interface (GUI) calling a Java native interface (JNI); at the JNI, using Java byte codes to call a storage driver; from the storage driver, accessing a mapped memory; and, in response to accessing the mapped memory, retrieving virtual key information*) without further limitations to produce a concrete and useful result. The recitation shows the method that is not tangibly embodied: i.e. an execution upon the recited step is not done by the device using the HAVi specification protocols, but rather is done by a user. Such claim fails to be in the technological or useful arts and thus fails to recite patent eligible subject matters.

Claims 13-14 fail to remedy the deficiencies of independent claim 12.

According to the analysis above, Claims 12-14 are to manipulate an abstract idea and held nonstatutory.

To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of application amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7.   Claim 1-17 are rejected under 35 U.S.C. 102(a) as being anticipated by HAVi SPECIFICATION Version 1.1, 5-2001 (hearafter: HAVi).

Examiner note: The whole reference will be anticipated. Due to high volume of the reference, some sections will be mailed. Examiner would respectfully refer Applicants to

http://www.havi.org/techinfo/docs/release-May15-HAVi1.1%28clean%29.pdf for more information.

Given the broadest reasonable interpretation of followed claims in light of the specification.

As per claim 1: HAVi discloses,

In a device using HAVi specification protocols, a method for maintaining HEventRepresentation virtual keys, the method comprising:

from a HAVi level two (L2) graphical user interface (GUI), accessing a JAR file; (See page 18, section 2.5.2, Level 2 UI, "Level 2 UI are based on a subset of Java AWT"; and see pages 414-419, section 7.4 Code Units (for install and uninstall Jar files)); *and,*

in response to accessing the JAR file, retrieving virtual key information (See page 429, section 8.3.2.5, User Input Representation, "getString", "getColor", "getSymbol", *retrieving virtual key information*).

As per claim 2: HAVi discloses, *The method of claim 1 wherein accessing a JAR file includes accessing a JAR file stored in read only memory (ROM)* (See page 455, section 9.5,Table 18, HAVi Configuration ROM Requirement).

As per claim 3: HAVi discloses, *The method of claim 2 wherein retrieving virtual key information includes retrieving virtual key information from a JAR file model selected from the group including static classes and data arrays.* (See page 90, section 3.10.2, Figure 26) by showing a code unit of a Jar file that includes *static classes and data arrays.*

As per claim 4: HAVi discloses, *The method of claim 3 wherein retrieving virtual key information in response to accessing the JAR file includes retrieving a HEventRepresentation application bundled with the virtual key information* (See page 429, section 8.3.2.5, User Input Representation, "by calling "getString", "getColor", "getSymbol", *bundled with the virtual key information*).

As per claim 5: HAVi discloses, *The method of claim 4 in which a first microprocessor machine using a first operating system is included; the method further comprising: receiving virtual key information as Java source code; using a Java compiler, compiling the Java source code into Java virtual machine (JVM) byte codes for the first operating system; and, using jar tools, archiving the JVM byte codes into a JAR file stored in ROM* (See Page 395, Java 1.1 Core API, and Jave.lang.Compiler).

As per claim 6: HAVi discloses, The *method of claim 5 further comprising: receiving the HEventRepresentation application as Java source code; using a Java compiler, compiling the Java source code into Java virtual machine (JVM) byte codes for the first operating system; and, using jar tools, archiving the JVM byte codes into a JAR file stored in ROM* (See Page 395, Java 1.1 Core API, and Jave.lang.Compiler).

As per claim 7: HAVi discloses,

In a device using HAVi specification protocols, a method for maintaining HEventRepresentation virtual keys, the method comprising: from a HAVi level two (L2) graphical user interface (GUI) accessing a Java input/output (I/O) ResourceBundle; (See page 18, section 2.5.2, Level 2 UI, "Level 2 UI are based on a subset of Java AWT"; see page 429, section 8.3.2.4, User Input Capabilities, "getInputDeviceSupport", section 8.3.2.5, User Input Representation, "Org.havi.ui.event.HrcCapabilities class" that contains getRepresentration); *and,*

in response to accessing the ResourceBundle, retrieving virtual key information (See page 429, section 8.3.2.5, User Input Representation, "getString", "getColor", "getSymbol", *retrieving virtual key information*).

As per claim 8: HAVi discloses, *The method of claim 7 wherein accessing the ResourceBundle includes using a ResourceBundle application program interface (API) to specify a property file* (Referring to Level 2 UI, page 425; where Level 2 UI is related to API, and see page 429, section 8.3.2.5, User Input Representation, referring to class that defines an event having a known representation; For example six colored key events).

As per claim 9: HAVi discloses, *The method of claim 8 in which a first microprocessor machine using a first operating system is included; the method further comprising: maintaining a HEventRepresentation application in a protocol associated with the first operating system; and, wherein accessing the ResourceBundle includes using a ResourceBundle API to specify a property file stored in a file system associated with the first microprocessor machine* (See pages 414-419, section 7.4 Code Units (for install and uninstall Jar files));

As per claim 10: HAVi discloses, *The method of claim 9 wherein using a ResourceBundle API to specify a property file stored in the file system includes specifying a property file stored in an input/output (I/O) device selected from the group of storage devices including hard disks and Flash memory* (See page 6, section 1.4 referring to "persistent memory" for storage devices).

As per claim 11: HAVi discloses, *The method of claim 10 further comprising: receiving virtual key information as text-based properties attributes in a ResourceBundle property file; integrating the virtual key information into a table of virtual key characteristics; and, storing the virtual key characteristics table as the ResourceBundle property file* (See page 429, section 8.3.2.5, User Input Representation, referring to the representation getString that allows a text representation).

As per claim 12: HAVi discloses, *In a device using HAVi specification protocols, a method for maintaining HEventRepresentation virtual keys, the method comprising: from a HAVi level two (L2) graphical user interface (GUI) calling a Java native interface (JNI); at the JNI, using Java byte codes to call a storage driver* (See page 18, section 2.5.2, Level 2 UI, "Level 2 UI are based on a subset of Java AWT"; and see pages 414-419, section 7.4 Code Units; see section 8,1 in page 425, HAVi level two UI allows applications written in Java; and see pages 448-453, section 8.7, and 8.8; and see page 55, Figure 18, code unit);

from the storage driver, accessing a mapped memory (See section 9.4 and 9.5, pages 454-455, HAVi

Unit Directory); *and, in response to accessing the mapped memory, retrieving virtual key information* (See

page 429, section 8.3.2.5, User Input Representation, "getString", "getColor", "getSymbol", *retrieving*

virtual key information).

<u>As per claim 13</u>: *The method of claim 12 wherein accessing a mapped memory includes accessing a*

mapped memory stored in an electrically erasable programmable read only memory (EEPROM) (See

page 55, Figure 18, code unit; and see page 455, section 9.5,Table 18, HAVi Configuration ROM

Requirement).

<u>As per claim 14</u>: *The method of claim 13 wherein retrieving virtual key information includes retrieving*

virtual key information from mapped memory in a binary format (See section 9.11.1, pages 429-430, for

Keys that represents virtual key information in numbers).

<u>As per claim 15</u>: *The method of claim 14 wherein using Java byte codes to call a storage driver at the*

JNI includes converting the Java byte code to binary format addresses (inherent in JVM); and, wherein

accessing a mapped memory from the storage driver includes using the binary format addresses to

access ASCII codes stored in the EEPROM (See section 9.11.1, pages 429-430, for Keys that represents

virtual key information in numbers).

<u>As per claim 16</u>: *The method of claim 15 in which a first microprocessor using a first operating system is*

included; the method further comprising: receiving the storage driver as first operating system machine

codes; and, storing the storage driver as machine code (See page 54, last two paragraphs, see page 55,

Figure 18, and third paragraph).

<u>As per claim 17</u>: *The method of claim 16 further comprising: receiving virtual key information as binary*

format code; using the storage driver, cross-referencing the virtual key information with EEPROM

addresses; and, storing the virtual key information in the EEPROM as machine code (See page 54, last

two paragraphs, see page 55, Figure 18, and third paragraph).

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Akira et al., EP 1063829 A2, discloses a gateway and hooked up HAVi devices.

Any inquiry concerning this communication or earlier communications from the examiner should
be directed to Ted T. Vo whose telephone number is (703) 308-9049. The examiner can normally be
reached on Monday-Friday from 8:00 AM to 5:30 PM ET. If attempts to reach the examiner by telephone
are unsuccessful, the examiner's supervisor, Tuan Dam, can be reached on (703) 305-4552.

The fax phone numbers:

(703) 872-9306 (for formal communication intended for entry);

(703) 746-5429 (for informal or draft communication, please label "PROPOSED" or "DRAFT").

Any inquiry of a general nature or relating to the status of this application or proceeding should be

directed to the Group receptionist whose telephone number is (703) 305-3900.

TED T. VO
Patent Examiner
Art Unit: 2122
June 25, 2004